

Claims

1. A block for forming a wall, wherein a plurality of analogous blocks being overlapped staggeringly and continuously in the wall, characterized in that,

said block being a longitudinally profiled member, and including a top surface, a bottom surface and two end surfaces;

the cross section of the block being substantially of a shape of downward-flared recess;

the top surface of said block having a mid ridge higher than two sides of the surface so that a left supporting slope and a right supporting slope being formed;

said upper surface and bottom surface being formed such that: when the block being overlapped with a analogous block thereunder to form the wall, the top surface of the underlying block being engaged with the bottom surface of the upper block, the left and right supporting slopes being used as a blocking structure and interlocking the vertically adjacent blocks.

2. The block for forming a wall according to claim 1, wherein

the blocks being shaped and sized such that: when three analogous blocks being overlapped vertically, the vertical distance between the top of the ridge of the bottommost block and the bottom foot of the uppermost block being less than one third of the height of the block.

3. The block for forming a wall according to claim 1, wherein

the blocks being shaped and sized such that: when the three analogous blocks being overlapped vertically, the top of the ridge of the bottommost block being higher than the bottom foot of the uppermost block.

4. The block for forming a wall according to claim 1, wherein

said supporting slope including a shoulder at the lower portion thereof, said shoulder having a top shoulder surface, a bottom shoulder surface, and lateral side surfaces, the top shoulder surface, the upper slope and the mid ridge constituting said top surface, when the block being engaged with an upper analogous block to form the wall, a projecting portion formed by the slope portion being engaged with the downward-flared shaped recess of the upper analogous block.

5. The block for forming a wall according to claim 2, wherein

Claims

said supporting slope including a shoulder at the lower portion thereof, said shoulder having a top shoulder surface, a bottom shoulder surface, and lateral side surfaces, the top shoulder surface, the upper slope and the mid ridge constituting said top surface, when the block being engaged with an upper analogous block to form the wall, a projecting portion formed by the slope portion being engaged with the downward-flared shaped recess of the upper analogous block.

6. The block for forming a wall according to claim 5, wherein

on either side of the block, the bottom shoulder surface of the shoulder and the bottom foot of the block being on the same plane, the top surface and the bottom surface being parallel to each other, the two end surfaces being parallel to each other, the two lateral side surfaces being parallel to each other, the end surfaces and the lateral side surfaces being vertical to the horizontal plane.

7. The block for forming a wall according to claim 1, wherein

the top of the mid ridge being at least one of sharp-angle shaped, platform shaped, arc-shaped and the combination thereof.

8. The block for forming a wall according to claim 1, wherein

at least one of the supporting slope, the bottom surface and the combination thereof being arranged in a stepped manner.

9. The block for forming a wall according to claim 1, wherein

at least one of the supporting slope, the downward-flared recess and the combination thereof being arranged in a corrugated manner.

10. The block for forming a wall according to claim 1, wherein

at least one of the top surface, the bottom surface and the combination thereof being arranged in a roughness manner.

11. The block for forming a wall according to claim 3, wherein

said top surface having a radiation-proof plate thereon, which extends out of the end surface, the radiation-proof plates of the adjacent blocks being connected in a manner of end to end, when the wall being formed by the blocks.

Claims

12. A block assembly for forming a wall, comprising blocks and auxiliary blocks, wherein said block being a longitudinally profiled member, and including a top surface, a bottom surface and two end surfaces; the cross section of the block being substantially of a shape of downward-flared recess; the top surface of said block having a mid ridge higher than two sides of the surface so that a left supporting slope and a right supporting slope being formed; said upper surface and bottom surface being formed such that: when the block being overlapped with a analogous block thereunder to form the wall, the top surface of the underlying block being engaged with the bottom surface of the upper block, the left and right supporting slopes being used as a blocking structure and interlocking the vertically adjacent blocks;

said blocks being engaged with the auxiliary blocks in the construction of the wall.

13. The block assembly for forming a wall according to claim 12, wherein the auxiliary block comprising three of said blocks, two of them longitudinally opposing to each other and joining, respectively, to the both sides of the other block;

said auxiliary block being provided at the intersection between the walls, being longitudinally engaged with the blocks, and being staggeringly overlapped.

14. The block assembly for forming a wall according to claim 12, wherein the auxiliary block comprising two of said blocks, the longitudinal portion of one block joining to one side of the other block so that the auxiliary blocks being in a shape of L or T;

said auxiliary block being provided at the intersection between the walls, being longitudinally engaged with the blocks, and being staggeringly overlapped.

15. A wall formed by blocks, wherein a plurality of analogous blocks being overlapped staggeringly and continuously in the wall, characterized in that,

said block being a longitudinally profiled member, and including a top surface, a bottom surface and two end surfaces; the cross section of the block being substantially of a shape of downward-flared recess; the top surface of said block having a mid ridge higher than two sides of the surface so that a left supporting slope and a right supporting slope being formed; said upper surface and bottom surface being formed such that: when the block being overlapped with a analogous block thereunder to

Claims

form the wall, the top surface of the underlying block being engaged with the bottom surface of the upper block, the left and right supporting slopes being used as a blocking structure and interlocking the vertically adjacent blocks;

in said wall, masonry joints being formed between the adjacent blocks, horizontal masonry joints being formed by the engagement between the top surfaces and the bottom surfaces, vertical masonry joints being formed by the engagement between the end surfaces, the vertically adjacent vertical masonry joints being arranged staggeringly.

16. The wall according to claim 15, wherein

a pillar being provided in the wall, at least one outward-extending piece being provided on said pillar;

the outward-extending piece being a longitudinally profiled member, and including a top surface, a bottom surface and two end surfaces, the cross section of the outward-extending piece being substantially of a shape of downward-flared recess, the top surface of the outward-extending piece having a mid ridge higher than two sides of the surface so that left supporting slope and right supporting slope being formed;

one of the end surfaces of the outward-extending piece being engaged with the pillar;

the other end surface of the outward-extending piece being engaged with the blocks, the top surface of the outward-extending piece being engaged with the bottom surface of the upper block, the bottom surface of the outward-extending piece being engaged with the top surface of the underlying block, a plurality of outward-extending pieces being arranged separately and orderly on the pillar, said outward-extending pieces being engaged with the staggeringly overlapped blocks adjacent to the pillar, the left and right supporting slopes of the outward-extending pieces being used as a blocking structure and making the vertically adjacent blocks to be interlocked.

17. The wall according to claim 15, wherein

a girder being provided in the wall,

a projecting piece being provided on the top surface of the girder, the lower surface of the projecting piece being engaged with the top surface of the girder, the projecting piece extending to the pillar at the nodal point of two adjacent beam/pillar, and engaging with the pillar, the projecting piece being engaged with the

Claims

downward-flared recess of the block, when the block engaging with the top surface of the girder,

a groove being provided on the bottom surface of the girder, the groove extending to the pillar at the nodal point of two adjacent beam/pillar, the groove being engaged with the top surface of the block, when the block engaging with the bottom surface of the girder.

18. The wall according to claim 15, wherein

an isolation layer being provided on one side of the wall, the isolation layer being composed of several isolation sub-layers, the isolation sub-layers in the same layer being arranged in a manner of end to end, the isolation sub-layer in vertically layers being in lap joint, the lower isolation sub-layer being interposed between the upper sub-layer and the wall, the joint between the upper isolation sub-layers being staggered with that between the lower isolation sub-layer,

an air gap being formed between the isolation layer and the wall.

19. The wall according to claim 15, wherein

said block being in a shape of a elongated plate, a miter wall being formed by staggeringly overlapping the elongated blocks, a vertical masonry joint being formed by the connection of the end surfaces of two blocks, the vertically adjacent vertical masonry joints being disposed in a stagger manner,

the end of the elongated block being supported on a supporting member.